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Claim 2. (Amended) The [raffinose synthase gene] isolated nucleic acid according to claim 1, wherein the plant is a dicot[yledon].

Claim 3. (Amended) The [raffinose synthase gene] isolated nucleic acid according to claim 2, wherein the dicot[yledon] is a leguminous plant.

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H2
Claim 4. (Amended) The [raffinose synthase gene] isolated nucleic acid according to claim 3, wherein the leguminous plant is broad bean.

Claim 5. (Amended) [A raffinose synthase gene having] An isolated nucleic acid comprising a nucleotide sequence coding for a protein (a) or (b) as defined below:

(a) a protein having the amino acid of SEQ ID NO:1;

(b) a protein having an amino acid sequence derived by deletion, replacement, modification or addition of one or several amino acids in the amino acid sequence of SEQ ID NO:1, and capable of producing raffinose by combining a D-galactosyl group through an $\alpha(1\rightarrow6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule.

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E1

Claim 6. (Amended) [A raffinose synthase gene having] An isolated nucleic acid comprising the nucleotide sequence of SEQ ID NO:2.

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Claim 7. (Amended) The [raffinose synthase gene] isolated nucleic acid according to claim 3, wherein the leguminous plant is soybean.

C11

Claim 8. (Amended) [A raffinose synthase gene having] An isolated nucleic acid comprising a nucleotide sequence coding for a protein (a) or (b) as defined below:

(a) a protein having the amino acid sequence of SEQ ID NO:3;

(b) a protein having an amino acid sequence derived by deletion, replacement, modification or addition of one or several amino acids in the amino acid sequence of SEQ ID NO:3, and capable of producing raffinose by combining a D-galactosyl group through an $\alpha(1\rightarrow6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule.

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E2

Claim 9. (Amended) [A raffinose synthase gene having] An isolated nucleic acid comprising the nucleotide sequence of SEQ ID NO:4.

Claim 21. (Twice Amended) A [gene] nucleic acid fragment having a partial nucleotide sequence of the [raffinose synthase gene] nucleic acid of claim 1.

C2 Claim 22. (Twice Amended) A [gene] nucleic acid fragment having a partial nucleotide sequence of the [raffinose synthase gene] nucleic acid of claim 5.

Claim 23. (Twice Amended) The [gene] nucleic acid fragment according to claim 21, wherein the number of nucleotides is in the range of from 15 to 50.

C3 Claim 29. (Twice Amended) [A raffinose synthase gene] An isolated nucleic acid obtained by identifying a DNA fragment containing a raffinose synthase gene or a gene fragment having a partial nucleotide sequence thereof by the method of claim 24, and isolating and purifying the DNA fragment thereof.

Please add the following new claims:

Sub E5--Claim 40. An isolated nucleic acid comprising (i) a C4 polynucleotide having a sequence that encodes a protein having an amino acid sequence selected from the group consisting of SEQ. ID. NO. 1, 3, 5 or 7 or (ii) a polynucleotide having a sequence complementary to said

sequence, or (iii) comprising a polynucleotide that hybridizes to the polynucleotide (i) or (ii) in 0.9 M NaCl, 0.09 M citric acid at 65°C.

04 Claim 41. An isolated nucleic acid comprising (i) a polynucleotide having a nucleotide sequence selected from the group consisting of SEQ. ID. NO. 2, 4, 6 or 8 or (ii) a polynucleotide having a sequence complementary to said sequence, or (iii) comprising a polynucleotide that hybridizes to the polynucleotide (i) or (ii) in 0.9 M NaCl, 0.09 M citric acid at 65°C.

42. An isolated nucleic acid obtained by identifying a DNA fragment containing a raffinose synthase gene or a gene fragment having a partial nucleotide sequence thereof by the method of claim 26, and isolating and purifying the DNA fragment thereof.--

REMARKS

The Office Action of September 15, 1998, presents the examination of claims 1-39. Claims 6, 9, 12, 13, 17 and 18 are indicated as allowed. This paper presents new claims 40 and 41 for examination and makes editorial amendments to claims 1-9, 21-23 and 29.